UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,847	12/09/2003	Arnold H. Bramnick	BOC9-2003-0037 (406)	5226

40987   7590   12/24/2008

AKERMAN SENTERFITT
P. O. BOX 3188
WEST PALM BEACH, FL 33402-3188

EXAMINER
VETTER, DANIEL

ART UNIT	PAPER NUMBER
3628	

MAIL DATE	DELIVERY MODE
12/24/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 October 2008*.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 7* is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1 and 7* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a)☐ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

Status of the Claims

1.   Claims 1, 3, 7, 10, 12, 16, 18, 20, and 24 were previously pending in this application. Claim 1 was amended, and claims 3, 10, 12, 16, 18, 20, and 24 were canceled in the reply filed October 14, 2008. Claims 1 and 7 are currently pending in this application.

Continued Examination Under 37 CFR 1.114

2.   A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 14, 2008 has been entered.

Response to Arguments

3.   Applicant's amendments overcome the rejections made under § 112, first and second paragraphs, and these are withdrawn.

4.   Applicant's arguments with respect to the newly added limitations are moot in view of the new grounds of rejection.

5.   Applicant's arguments with respect to the Yu reference have been fully considered but are not persuasive. Applicant argues that Yu's disclosure is only concerned with rerouting and rescheduling flights rather than flight cancellation. Remarks, page 8. Examiner respectfully disagrees. The optimization engine in Yu considers solutions that include at least one flight cancellation among the candidate flights, as well as other options such as rerouting and rescheduling. "Based on the above information a solution comprised of flight delays and cancellations, Ferry Flight creations, as well as aircraft reassignments is produced . . . ." Yu, col. 9, lines 29-31 (emphasis added).

6.   Applicant also argues that while Yu discloses a real-time system, only the
decisions are made in real-time and the financial data is outdated. Remarks, page 8.
Examiner considers Yu's "automated, real-time, decision support system" (col. 4, line
33) to meet the disputed limitation. Nothing in Yu appears to describe the financial data
as being out-of-date. Using old information would frustrate the entire purpose of Yu's
system: to quickly make optimized decisions with a minimal impact on revenue (see col.
4, lines 33-50). One of ordinary skill in the art would accordingly not consider the data
in Yu to be anything but current. Moreover, claim 1 actually recites "obtaining in real
time flight financial data from at least one flight financial data store." The "real time"
aspect appears to characterize the step of obtaining, and not the nature of the financial
data in the data store itself.

7.   Examiner acknowledges that Lanigan's disclosure, while directed to optimizing
airline operations, is not concerned specifically with flight cancellations. However, it is
merely relied upon to demonstrate that time-critical cargo value is an old and well-
known type of airline revenue portion that would be obvious to include in Yu's revenue
calculations.

Claim Rejections - 35 USC § 101

8.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

9.   Claims 1 and 7 are rejected under 35 U.S.C. 101 because the claimed invention
is directed to non-statutory subject matter.

10.   Claims 1 and 7 are directed to a series of steps. In order for a series of steps to
be considered a proper process under § 101, a claimed process should either: (1) be
tied to another statutory class (such as a particular apparatus) or (2) transform
underlying subject matter (such as an article or materials). *Diamond v. Diehr*, 450 U.S.
175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*,
409 U.S. 63, 70 (1972). Thus, to qualify as patent eligible, these processes must

positively recite the other statutory class to which it is tied (e.g., by identifying the apparatus that accomplishes the method steps), or positively recite the subject matter that is being transformed (e.g., by identifying the product or material that is changed to a different state). The claims do not recite any specific computerized or mechanical apparatus used to perform any steps of the process. Moreover, no otherwise statutory subject matter is manipulated or transformed by the recited steps. While the claims do recite processing of data, the manipulated data represents revenue and other financial information rather than physical and tangible objects. *Cf. In re Abele*, 684 F.2d 902 (C.C.P.A. 1982) (holding a claim was directed to statutory subject matter—the transformed data represented the physical structure of bones, organs, and other body tissues). As such, the claims concretely identify neither the apparatus performing the recited steps nor any transformation of underlying materials, and accordingly are directed to non-statutory subject matter. *See also In re Bilski*, No. 2007-1130 (Fed. Cir. Oct. 30, 2008) (en banc) (clarifying the "machine-or-transformation" test; discussing *Abele* and transformations of data (slip. op. at 25-28)).

Claim Rejections - 35 USC § 103

11.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12.   Claims 1 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yu, et al., U.S. Pat. No. 6,314,361 (Reference A of the PTO-892 part of paper no. 20070319) in view of Lanigan, Sr., U.S. Pat. Pub. No. 2003/0061085 (Reference A of the PTO-892 part of paper no. 20080219), Walz, et al., U.S. Pat. No. 5,325,303 (Reference A of the attached PTO-892), and Creed, et al., U.S. Pat. Pub. No. 2002/0194037 (Reference B of the attached PTO-892).

13.   As per claim 1, Yu teaches a method comprising: detecting a flight cancellation condition (col. 8, lines 51-55); determining at least two flight cancellation candidates using flight operations data including equipment, crew, and plane availability (col. 9, lines 17-28; col. 8, lines 24-26); obtaining in real time flight financial data from at least one flight financial data store for each of at least two flight cancellation candidates (col. 8, lines 17-19, 29-31; col. 4, line 33); the flight financial data including a value of passenger tickets (col. 18, line 63 – col. 19, line 2), and cost associated with operating an aircraft of each of the at least two flight cancellation candidates (col. 8, lines 29-31); processing said flight financial data for said flight cancellation candidates to determine for each flight cancellation candidate an amount of revenue lost by canceling a flight corresponding to a particular flight cancellation candidate (col. 8, lines 22-23, 55-56; col. 9, lines 20-28; col. 10, lines 6-14), wherein amounts of revenue include values for coupons held by passengers assigned to each flight corresponding to the particular flight cancellation candidate (col. 18, line 61 - col. 19, line 2); presenting for each flight cancellation candidate the amount of revenue lost determined based upon the financial data for said flight cancellation candidates (col. 8, lines 22-23, 56-57; col. 9, lines 29-31); and selecting from among said at least two flight cancellation candidates a flight cancellation candidate and canceling the flight corresponding to the selected flight cancellation candidate if the amount of revenue lost by canceling the corresponding flight is less than the revenue lost by canceling any other flight corresponding to a non-selected flight cancellation candidate (col. 10, lines 1-14; col. 11, lines 53-55).

        Yu does not explicitly teach that flight financial data includes a value of cargo, and amounts of revenue include values for time-critical cargo; which is taught by Lanigan (¶ 0038). It would have been prima facie obvious to one having ordinary skill in the art at the time of invention to include values for time-critical cargo as taught by Lanigan into the broadly disclosed flight revenue values of Yu because this is merely a combination of old elements, and in the combination each element would have performed the same function it did separately (i.e., identify a portion of total flight revenue). One of ordinary skill in the art would also have recognized that the results of the combination were predictable and could be implemented through routine

engineering. Similarly, Yu does not teach that the financial data includes a value of United States Postal Service (USPS) mail; which is taught by Walz (col. 103, lines 48-57). It would have been prima facie obvious to one having ordinary skill in the art at the time of invention to incorporate this data for the same reasons set forth above. Finally, while Yu teaches aircraft and flight operating costs generally (e.g., col. 8, lines 29-31), it does not explicitly teach that this is including crew and fuel cost; which is taught by Creed (¶ 0004). It would have been prima facie obvious to one having ordinary skill in the art at the time of invention to incorporate this data for the same reasons set forth above. These further additions of specific types of data to Yu would lead to the predictable result of an enhanced flight optimization engine that makes cancellation decisions based upon a greater number of financial considerations.

14.   As per claim 7, Yu in view of Lanigan, Walz, and Creed teaches the method of claim 1 as described above. Yu further teaches said flight financial data store comprises at least one selected from the group consisting of cargo, crew, reservations, and flight operations information (col. 8, lines 29-31, 40-42).

Conclusion

15.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL P. VETTER whose telephone number is (571)270-1366. The examiner can normally be reached on Monday through Thursday from 8am to 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on (571) 272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John W Hayes/
Supervisory Patent Examiner, Art Unit 3628